WHAT IS CLAIMED IS:

1. A method for reducing odor, said method comprising contacting a substrate containing a thin coating of colloidal nanoparticles with an odorous compound, said colloidal nanoparticles having an average size of less than about 100 nanometers, a surface area of from about 50 to about 1000 square meters per gram, and a pore volume of less than about 0.5 milliliters per gram.

2. A method as defined in claim 1, wherein said colloidal nanoparticles are formed from a material selected from the group consisting of silica, alumina, zirconia, magnesium oxide, titanium dioxide, iron oxide, zinc oxide, copper oxide, organic compounds, and combinations thereof.

3. A method as defined in claim 1, wherein said colloidal nanoparticles comprise alumina.

4. A method as defined in claim 1, wherein said colloidal nanoparticles comprise silica.

5. A method as defined in claim 4, wherein said colloidal nanoparticles are formed by an ion-exchange technique.

6. A method as defined in claim 1, wherein said colloidal nanoparticles have an average size of from about 1 to about 50 nanometers.

7. A method as defined in claim 1, wherein said colloidal nanoparticles have an average size of from about 4 to about 20 nanometers.

8. A method as defined in claim 1, wherein said colloidal nanoparticles have a surface area of from about 100 to about 600 square meters per gram.

9. A method as defined in claim 1, wherein said colloidal nanoparticles have a pore volume of less than about 0.4 milliliters per gram.

10. A method as defined in claim 1, wherein said colloidal nanoparticles have a pore volume of less than about 0.3 milliliters per gram.

11. A method as defined in claim 1, wherein said odorous compound is selected from the group consisting of mercaptans, ammonia, amines, sulfides, ketones, carboxylic acids, aldehydes, terpenoids, hexanol, heptanal, pyridine, and combinations thereof.

12. A method as defined in claim 1, wherein the solids add-on level of said colloidal nanoparticles is from about 0.001% to about 20%.

13. A method as defined in claim 1, wherein the solids add-on level of said

colloidal nanoparticles is from about 0.1% to about 4%.

14. A method as defined in claim 1, wherein said colloidal nanoparticles cover at least about 50% of a surface of said substrate.

15. A method as defined in claim 1, wherein said colloidal nanoparticles cover at least about 80% of a surface of said substrate.

16. A method as defined in claim 1, wherein said substrate has a porosity such that from about 20 to about 500 cubic feet of air is capable of flowing through 1 square foot of said substrate per minute under a pressure differential of 125 Pascals.

17. A method as defined in claim 1, wherein said substrate comprises a nonwoven, woven, or paper web.

18. A method as defined in claim 1, wherein said colloidal nanoparticles adsorb at least about 25% of said odorous compound when contacted therewith.

19. A method as defined in claim 1, wherein said colloidal nanoparticles adsorb at least about 45% of said odorous compound when contacted therewith.

20. A method as defined in claim 1, wherein said colloidal nanoparticles adsorb at least about 65% of said odorous compound when contacted therewith.

21. A method as defined in claim 1, wherein said thin coating has a thickness of less than about 1 micron.

22. A method as defined in claim 1, wherein said coating has a thickness of from about 2 to about 500 nanometers.

23. A method as defined in claim 1, wherein said coating has a thickness of from about 4 to about 200 nanometers.

24. A method for reducing odor, said method comprising contacting a porous substrate containing a coating of colloidal silica nanoparticles with an odorous compound, said coating having a thickness of less than about 1 micron, said colloidal silica nanoparticles having an average size of from about 1 to about 50 nanometers, a surface area of from about 50 to about 1000 square meters per gram, and a pore volume of less than about 0.4 milliliters per gram, said odorous being selected from the group consisting of mercaptans, ammonia, amines, sulfides, ketones, carboxylic acids, aldehydes, terpenoids, hexanol, heptanal, pyridine, and combinations thereof.

25. A method as defined in claim 24, wherein said colloidal silica

nanoparticles have an average size of from about 4 to about 20 nanometers.

26. A method as defined in claim 24, wherein said colloidal silica nanoparticles have a surface area of from about 100 to about 600 square meters per gram.

27. A method as defined in claim 24, wherein said colloidal silica nanoparticles have a pore volume of less than about 0.3 milliliters per gram.

28. A method as defined in claim 24, wherein the solids add-on level of said colloidal silica nanoparticles is from about 0.001% to about 20%.

29. A method as defined in claim 24, wherein said substrate comprises a nonwoven, woven, or paper web.

30. A method as defined in claim 24, wherein said coating has a thickness of from about 2 to about 500 nanometers.

31. A substrate for reducing odor, said substrate being porous and comprising a nonwoven, woven, or paper web, said substrate containing colloidal nanoparticles having an average size of from about 1 to about 50 nanometers, a surface area of from about 50 to about 1000 square meters per gram, and a pore volume of less than about 0.4 milliliters per gram.

32. A substrate as defined in claim 31, wherein said particles are formed from a material selected from the group consisting of silica, alumina, zirconia, magnesium oxide, titanium dioxide, iron oxide, zinc oxide, copper oxide, organic compounds, and combinations thereof.

33. A substrate as defined in claim 31, wherein said colloidal nanoparticles comprise alumina.

34. A substrate as defined in claim 31, wherein said colloidal nanoparticles comprise silica.

35. A substrate as defined in claim 31, wherein said colloidal nanoparticles have an average size of from about 4 to about 20 nanometers.

36. A substrate as defined in claim 31, wherein said colloidal nanoparticles have a surface area of from about 100 to about 600 square meters per gram.

37. A substrate as defined in claim 31, wherein said colloidal nanoparticles have a pore volume of less than about 0.3 milliliters per gram.

38. A substrate as defined in claim 31, wherein the solids add-on level of said colloidal nanoparticles is from about 0.001% to about 20%.

39. A substrate as defined in claim 31, wherein said colloidal nanoparticles cover at least about 50% of a surface of said substrate.

40. A substrate as defined in claim 31, wherein said colloidal nanoparticles cover at least about 80% of a surface of said substrate.

41. A substrate as defined in claim 31, wherein said colloidal nanoparticles are coated onto a surface of said substrate, said coating having a thickness of less than about 1 micron.

42. A substrate as defined in claim 41, wherein said coating has a thickness of from about 2 to about 500 nanometers.

43. An absorbent article that comprises the substrate of claim 31.

44. An absorbent article as defined in claim 43, further comprising at least one liquid-transmissive layer and a liquid-absorbent core, wherein said substrate forms at least a portion of said liquid-transmissive layer, said liquid-absorbent core, or combinations thereof.

45. An absorbent article as defined in claim 44, wherein the absorbent article includes a liquid-transmissive liner, a liquid-transmissive surge layer, a liquid-absorbent core, and a vapor-permeable, liquid-impermeable outer cover, said substrate forming at least a portion of said liner, said surge layer, said absorbent core, said outer cover, or combinations thereof.

46. A paper product that comprises the substrate of claim 31.

47. A facemask that comprises the substrate of claim 31.